

CLMPTO

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CLAIMS 1-15 CANCELED

16. (currently amended) A microjoint interconnect structure comprising:

(a) a carrier substrate having an array of interconnects for connecting device components; said

~~_____ (b) _____~~ the carrier, including a substrate and a dielectric film, and microjoint receptacles comprising an adhesion layer, diffusion barrier layer and a noble metal layer; and

(c) microjoining pads on the device side, comprising an adhesion layer, solder reaction barrier layer and fusible solder joint ball for each component;

~~_____ (d) _____~~ said microjoint pads on the device on the carrier side matching said microjoint receptacles on the carrier side.

17. (currently amended) A microjoint interconnect structure as defined in Claim 16 wherein the device components are selected from the group consisting of: semiconductor chips and optical component chips and the like.

CLAIM 18 CANCELED

19. (currently amended) A microjoint interconnect structure comprising:

(a) a carrier substrate having an array of interconnects for connecting device components;

~~_____ (b) _____~~ the carrier, including a substrate and dielectric film with microjoining pads each comprising an adhesion layer, solder reaction barrier layers and fusible solder joint ball; and

~~(eb)~~ the microjoint receptacles on the device side comprising an adhesion layer, diffusion barrier layer and a noble metal layer;

~~_____ (d) _____~~ said microjoint pads on the carrier side matching said microjoint receptacles on the device.

20. (currently amended) A microjoint interconnect structure as defined in Claim 19 wherein the device chips are selected from the group comprising

consisting of: semiconductor chips, optical device chips, and communication chips.

CLAIMS 21-35 CANCELED